

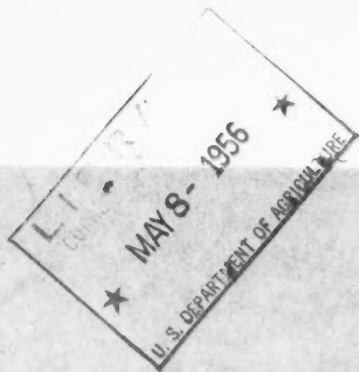
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Cornell Countryman

April, 1956

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'Son, Our *New Frontier* Is Right Here on the Farm'



YES SIR, the farmer is right. Just think of the improvements he and his son still can make in their farming practices, which are already mighty good.

Through better control of noxious weeds and crop and livestock insects and diseases; through improved land use, soil-building crop rotations, application of fertilizers, and labor saving equipment, they can increase yields and profits still more.

The many new practices available to improved farming constitute a modern challenge and promise better living—better than in the old days when, after farmers had “worn out” their land, they could “move on West” and start again on virgin soil.

Although this farmer and his son practice soil and water conservation, fertilize liberally, utilize manure from their livestock, and grow new and improved

varieties of adapted crops, they see still other frontiers. Research, particularly that of the agricultural experiment stations, constantly reveals new and better methods. The use of such methods can lead to more profitable farming and better living.

Successful farmers everywhere are aiming at higher production and lower costs—through efficient practices. Without exception, these successful farmers find modern farm equipment to be an integral component of the new frontier.



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Quality Farm Equipment Since 1837



Brand new New Idea mounted parallel bar rake, unique in the hay tool field, is exciting the interest of farmers throughout the country.

Here's a really exciting new rake from NEW IDEA

New mounted parallel bar rake fits 24 different makes and models of tractors, makes fluffy, quality windrows fast.

This is a rake that will really speed your haying the quality way — an all-new addition to the NEW IDEA line of hay tools.

Unique in its field. Brand-new — the only mounted parallel bar rake that fits 24 different makes and models of tractors. Because it lifts, it maneuvers easily.

Cuts raking time. Rakes at higher speed with less leaf shattering. It can cut raking time almost in half. This is partly because this unusual new tool moves hay from swath to windrow with half the forward motion. A double driving sheave provides a choice of speeds to accommodate variations in ground conditions or tractor PTO speeds.

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Send free literature checked

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☐ Pull type rakes & tedders

- ☐ Booklet "Tried and New Ideas for Making Hay"

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From the Editor's Desk

Who are we serving?

THIS February, the chairman of the Farm and Home Week Committee announced that for the first time in the history of that open house, students in both upper campus colleges would organize and carry out their chores together. This was a considerable improvement over past years. Before that, student participation was carried out with very little mutual consultation. The result was inefficiency in running the concessions, lack of co-ordination between them, and a gradual decrease in the number of students participating.

During March 19-23, student chores were very well organized on the whole. A new social co-ordinating committee was responsible for this improvement. But no amount of student efficiency could cover up the poor overall organization of the week.

Neither college appeared to agree about who Farm and Home Week was supposed to benefit. A student official of the open house told the *Countryman* in February that the program would be geared for the increased number of high school students attending. If this were so, the College of Agriculture supposedly should have planned exhibits appealing to youngsters as well as adults. But there were actually far fewer exhibits of this type than in the past, and most students were under the impression that this was done to cut down the number of high school visitors. Either the student official was in error, or the College of Agriculture wasn't very sure of what it wanted to do.

The College of Home Economics, on the other hand, planned its program for adults. It substituted lectures for exhibits and fashion shows. Unfortunately, planners forgot that the people who visit Farm and Home Week are not all college students. They do not enjoy, and often cannot understand the type of lecture that was featured.

A mutual definition of goals is certainly in order before next year, and it seems probable that this might happen. Both colleges have already begun a thorough evaluation program. But again, each one is doing it separately. There is no joint consultation except to get data from one another. Lack of co-ordination between colleges cannot be corrected by separate evaluation programs.

Officials are also faced with the difficult problem of avoiding exhibits which are too technical, and yet not using ones that resemble a series of side shows. High school students, who want simple, more entertaining exhibits, complicate the problem. But Farm and Home Week's most important function is to show the farmers the latest developments in agriculture, and teach them how they can make use of these improvements on their own farms. For homemakers, the open house must show direct methods of maintaining a more efficient and happy household.

Undoubtedly, it is important to get youngsters interested in agriculture and home economics, since they will be farmers and housewives some day. But two things must be considered when Farm and Home Week exhibits are planned. First, teaching high schoolers should be only a secondary goal of Farm and Home Week. Second, much of the time, money, and effort put into these exhibits is often wasted on children so young that they fail to get any value from them other than "a day off from school."

Cornell's Farm and Home Week has been hailed for many years as one of the finest ways to extend new ideas to farmers, and homemakers. But unless its planning becomes more effectual, it will continue to slide into mediocrity, and fail to attract the people it should benefit.

Cornell Countryman

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Member of Agricultural College
Magazines, Associated

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Our Cover: Emmett Bailey '72, son of Roy Bailey '49, has already started fulfilling his farm practice requirements. Em demonstrated some short cuts in feeding lambs to photographer Gordon D. Rapp '49.

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Motion Pictures on Insect Control Available for Showing on Campus

As part of its educational program, Hercules Powder Company—makers of toxaphene for agricultural insecticides—has produced the following informative motion pictures. They are available on loan for use by Agricultural College classes. Arrangements should be made by your instructor, giving titles desired and three alternate dates on which your class could see them.

THE ALFALFA WEEVIL AND ITS CONTROL

Shows life cycle, damage, and control methods.

(12 minutes)

COTTON INSECTS AND THEIR CONTROL

Interviews with successful growers, close-ups of common insects.

(40 minutes)

CUTWORM CONTROL

Habits, damage done, and recommended controls.

12 minutes)

THE POLLINATION OF ALFALFA

Close-ups of bees, showing importance of protecting these beneficial insects.

(25 minutes)

THE SPITTLEBUG AND ITS CONTROL

Interviews with farmers and other authorities on control of this damaging insect.

(14 minutes)

DESIGN FOR A LABORATORY

A visit to the Hercules Powder Company's Agricultural Chemicals Laboratory.

(11 minutes)

LOW-VOLUME SPRAYING

How to mix insecticides and adjust sprayer for efficient application.

(14 minutes)

(All films are 16 mm. in sound and color.)

Educational Booklets and Slides Also Available.

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This advertisement appears in AGRICULTURAL COLLEGE PUBLICATIONS

APRIL, 1956

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Around the Upper Quad

ON April 24th, Professor Donald Belcher, Director of Airphoto Interpretation Center at Cornell, will speak to the Ag-Eng Club at 8:00 p.m. in Riley-Robb Hall 400. Professor Belcher is widely known for his skillful interpretation of air photographs. Information from these air photos is used to aid engineers with construction projects. One of Professor Belcher's most recent projects was to help locate the route for the St. Lawrence Sea Way.

Dr. Allen of the ornithology department spoke to the Floriculture Club in the Plant Science seminar room on April 11th. Elections were held.

The Home Ec. Club is now holding a morning coffee hour every day, Monday thru Friday, from 9:00-10:30 a.m. in the Warren Student Lounge. While you are on the Upper Quad you are invited to drop in for coffee and donuts for only a slight charge.

The Pre-Vet Club held a meeting on April 12th, at which time Dr. Sheffy, researcher in veterinary medicine at Cornell, will speak about "Opportunities for Vets." Before that time, the acceptance of applications to the Vet school for the fall of '56, will have been announced. Dr. Sheffy explained briefly the responsibilities of veterinary students and gave encouragement to those who were not accepted to the Vet school this year.

On May 8th, The Dairy Science Club will hold a banquet at the Clinton House, in downtown Ithaca, for milk dealers and dairy organizations in New York State. Former Assistant Secretary of Agriculture McConnell, who is now associated with the Cornell Business School, will be the guest speaker. An award to the person who contributed the most to the dairy industry in 1956 will be presented. The Dairy Science Club will also present awards to members who have given outstanding service to the club.

All juniors in good standing with the College of Agriculture are invited to Ho-Nun-De-Kah's Junior Smoker on the 19th of April in Warren Hall. At this time Dean Myers of the College of Agriculture will speak and the acceptance of new members to the honorary will be announced.

The Conservation Club held a slide illustrated lecture in Fernow Hall on April 12th. Bob Smith, graduate student in wild life management, will speak on "Wild Life's Use of Reforestation."

On March 15th, The Cornell Association of Teachers of Agriculture held a winter party in Bibbins Hall in downtown Ithaca. Major Rex Morgan was the center of attraction as he hypnotized some of his audience. Over 100 people attended the party.

Inquiring Countryman

QUESTION

What Do You Think of the 1956 Farm and Home Week?

ANSWERS

Mrs. H. W. Hess, from Phoenix, N. Y.—I notice the reduction in the number of exhibits, and I miss them. Of course lectures are interesting, but I like to see more concrete things.

Mrs. W. Lorenzo Palmer, from Williamson, N. Y.—I thought there was a lack of exhibits in the women's fields, even though some of the lectures were just as valuable. The men's programs seemed much more worthwhile.

Bob Lyman, from Rochester, N. Y.—Although the exhibits put on by the College this year are smaller, I think they are fairly effective, and serve their purpose well. The most serious fault is that there are too many high school youngsters running wild and spoiling the whole effect for those other people who are here to get some value from Farm and Home Week. I think that some of these groups should have more strict supervision or else should not be allowed to come en masse.

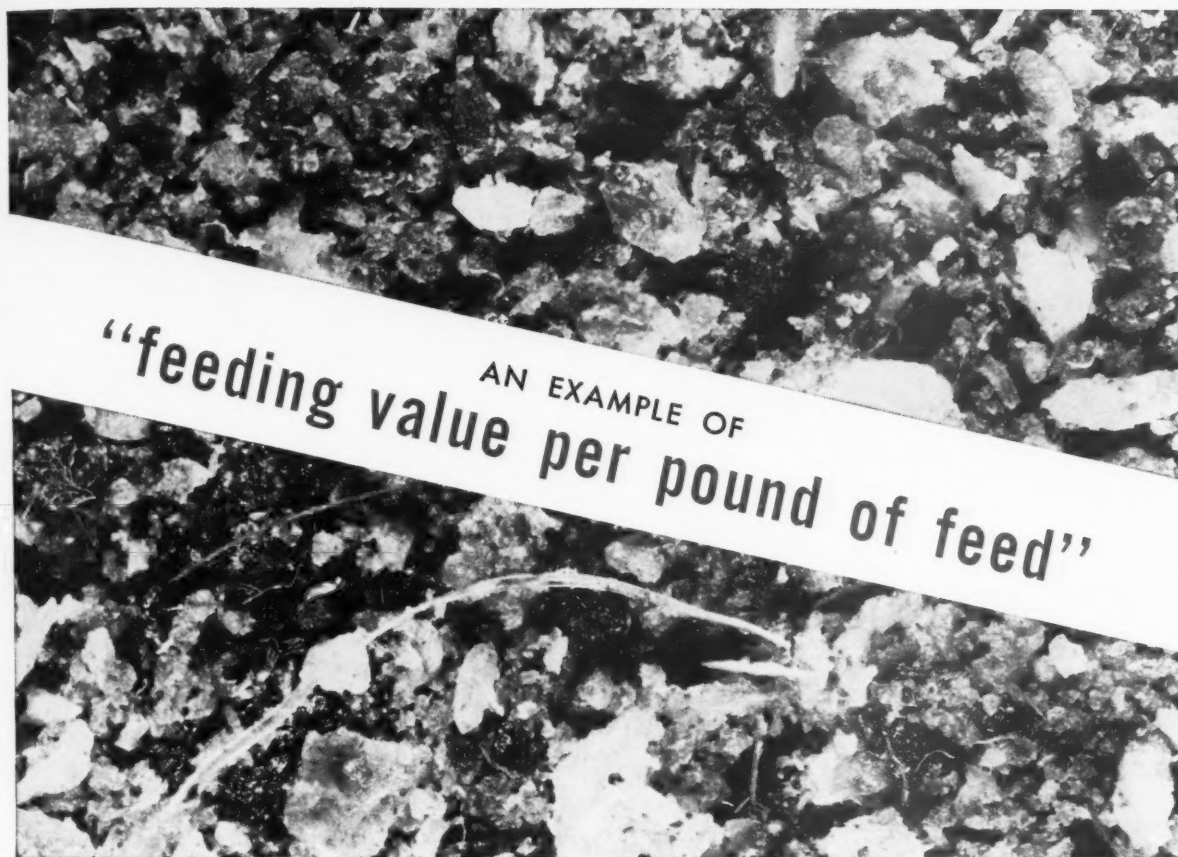
Mrs. Ralph Mosher, from Slingerlands, N. Y.—I'm enjoying Farm and Home Week very much. I usually come every year, and look for special exhibits. Since I do custom work, I'm interested in the vegetable crops, machinery, and agronomy.

Bruce Johnson, from Ithaca, N. Y.—I like it the way it is. That's why I come!

Jerry Rughcouglae '57, Ag. Eng. — The exhibits were very good, but there are too many kids running all over. It is good that they see Farm and Home Week, but they should be supervised. I think the farmers' programs were the best.

Mrs. Phyllis Rice, from Ithaca, N. Y.—I think there could be more exhibits in home economics. Also, there weren't enough free samples. The children were in places they weren't supposed to be, but on the whole, it was pretty good.

James T. Veeder, from Ithaca, N. Y.—One reason attendance was lower this year is that to many people the College of Agriculture is not new. These folks come to Cornell throughout the year to attend 4-H Club Congress, the Poultryman's Get-Together, and other meetings. We should appraise the Farm and Home Week program in view of those persons attending. We should also examine the possibilities of using mass media (T.V., radio and the press), as a substitute for Farm and Home Week.



An INSIDE LOOK at Beacon quality

THE SAMPLE of Beacon's meat and bone scrap (top photo) shows clean, well cooked particles of meat and bits of bone, free of blood meal, fibrous material or other contamination. Because it is non-extracted it contains more fat. A special supplier blends this product to Beacon specifications for uniformity and high quality. Processed from properly slaughtered animals, it has a clean appetizing odor. No fallen animals are used, thus preserving palatability and avoiding the dangers common to decomposed matter.

Notice the presence of fuz, fur and vegetable fiber of no feeding value in the poorer meat scrap sample (lower photo). The dark ingredient is blood meal, used to boost the protein analysis of lower quality scrap. Blood meal can be toxic to poultry when decomposition occurs before drying.

Though both samples are high in protein, there is a great difference in feeding value per pound, in protein quality, in vitamins, minerals and caloric content. Photos are enlarged 15 times.

THINK . . . of feed in terms of *feeding value per pound of feed . . .* because of quality ingredients and a skilful formula.

Beacon buys quality ingredients because they cost less to feed . . . give you more for your feed dollar.

See how it pays . . .

1. Birds need eat less feed.

2. Greater protection against stresses which also means lower mortality.

3. Higher livability and sustained production bring lower feeding costs . . . more profit.

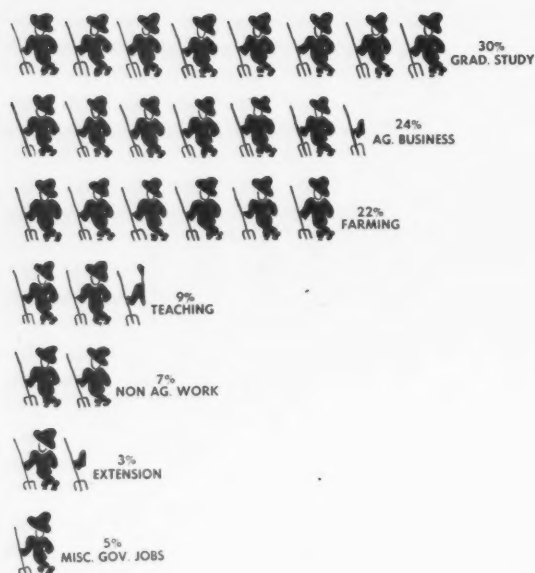


TOP poultrymen feed

BEACON

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Beacon Dealers are located
from Maine to the Virginias.



Wahl

Not All Are Farmers

By MARY R. WAHL '56

RIGHT now, most seniors are wondering what they will be doing after graduation. Unless Uncle Sam or some other wealthy relative has already solved this problem, they are busy attending interviews, typing resumés, and haunting the placement office. As they accept their future jobs, it will not be surprising if only a small percentage of the College of Agriculture's graduating class chooses farming as an occupation. According to Professor Tyler, in charge of vocational guidance and placement, only 22 percent of the 1955 class became farmers whereas 71 percent entered fields related to agriculture.

What are these fields? What training and duties do the jobs entail? To answer these questions, *The Cornell Countryman* wrote to members of the class of '49 who are now employed in agricultural fields. They willingly gave their advice and opinions.

Mr. Paul Barrett began his career as a farm loan officer. Now, as Assistant Manager of the Agricultural Credit Department of the National Bank and Trust Company in Norwich, New York, he investigates and prepares reports on credit, and makes loans. In processing these loans, he is often asked for advice on financial problems, such as income tax, Social Security, and father and son partnerships. He may also be called upon to manage or sell a farm. Mr. Barrett recommends this type of job to college graduates who "have an interest in the business world."

A Master's Degree is required for most jobs in the field of social work, according to Miss Dalores Hoffman, senior psychiatric social worker at the Los Angeles State Mental Hygiene Clinic. Her job entails psychotherapy with children and adults who are having problems in their daily living and adjustment to life. The need for graduate work in the field was also brought out by Mr. Ruben Pannor, a caseworker supervisor at Vista Del Mar Child-Care Service in Los Angeles, California. At Vista Del Mar, troubled children from broken or severely disturbed homes are placed in cottages or in foster homes. According

to Mr. Pannor, "Social work is a profession that brings one into direct contact with people and their problems. He adds, "One of the greatest needs in the field of social work is for trained people with a background in rural problems to work in rural communities."

One of a team of about 80 Agricultural Attaches and Agricultural Officers who are stationed throughout the world in areas significant to United States agriculture, Mr. John Montel is now in Ciudad Trujillo, Dominican Republic. Attaches furnish information on foreign agricultural developments which might influence the planning of American agricultural production and marketing. They look constantly for ways to expand foreign outlets for American agricultural products. This job requires a working knowledge of the country's language, and a familiarity with local agriculture, monetary policies, import regulations, and various other aspects of the general economy. Mr. Montel urges that graduates "who have a generous tolerance of foreign peoples and their customs, and who are willing to adapt themselves to a new way of life, as well as living 24 hours a day with a fascinating job in agriculture" should enter the Foreign Agriculture Service.

As a teacher of vocational agriculture at the Morrisville-Eaton Central School, Mr. Hohn A. Vaughan has a threefold job. First, he teaches agriculture to boys in the classroom. Secondly, he works outside the classroom in the summertime, visiting informally with his students on their home farms, and learning of their desires and ambitions. The third part of his work shows the results of the classroom and home visits. Mr. Vaughan works with boys who have been graduated and who are now in farming. He advises, "A prospective teacher must have a desire to work with boys and to understand them as individuals. He must like farming, animals, and rural people in general. He must also have a good knowledge of basic agriculture."

MR. Robert VanEtten is a research biologist for the Michigan Department of Conservation. He studies game birds and animals to gain information for better utilization of these creatures. In his present work with deer, Mr. VanEtten is studying their life history and testing various census methods in order to determine the effects of a known number of deer on a given range. A great deal of his time is spent in the field with the animals. He suggests, "Training is very important in this field. Master of Science and Doctor of Philosophy degrees are becoming more common, and men with superior training are commanding better positions. Most positions are with state and federal agencies; there are few opportunities in private enterprise."

"Owning a mink ranch is not only an avocation but a way of life", comments Mr. Steven R. Weiss, of White Lake, New York. "It entails a routine pattern whereby the ranch operator conducts his daily life in schedule with the cycles natural to his livestock." Feeding, watering, and caring for the animals, cleaning and repairing pens, knowing which animals to breed for perfect pelts, when to kill, and where to market the pelts are all involved in this kind of job. Mr. Weiss suggests that there are profitable opportunities in this field for graduates trained in genetics, nutrition, or farm management.

Seven years after graduation, most of the class of '49 is still serving agriculture, although their methods may vary from teaching vocational agriculture to working in the Dominican Republic as an Agricultural Attache. Though this year's senior class may not know exactly what they will be doing next year, they can be sure that they will work on a great variety of jobs within the scope of agriculture.

Power steering, "live" P.T.O. and other developments make farm machinery operation easier and more efficient.

By DOUGLAS D. INNES '59



Ford Motor Company

This hydraulically operated disk harrow is one of the many improved implements which are making farming more efficient.

Farm Machinery is Still Improving

MECHANIZED agriculture has demanded rapid improvements in tractors and farm implements. But, in the past few years, changes in farm machinery have been more gradual, each innovation lending itself to more efficient farming methods in a small but important way. It might seem that progress in farm implement development has "bogged-down", because improvements are not so radical as they used to be. But when these recent improvements are combined, they do as much to improve farming operations as early inventions such as the reaper and the tractor did.

The tractor's power-take-off, or P.T.O. system has been used for several years to operate balers, combines, and field choppers. This enables farmers to better utilize the power supplied by their tractors. One of the main disadvantages of power-take-off operation is that the baler or other machine, stops running when the tractor's clutch is depressed. If the going is rough, the operator is required frequently to shift to neutral to keep the P.T.O. running when the tractor is at a standstill. This difficulty was overcome with the development of "live" power-take-off.

"**LIVE**" P.T.O., though related to engine speed, operates independently of the tractor's power transmission system. Thus the tractor may be stopped without interfering with the operation of the machine which is run by the tractor's P.T.O. One company has developed a power-take-off system that lets the operator decide whether to use the P.T.O. related to engine speed, or an alternate system direct-

ly related to the speed of the rear wheels. This makes P.T.O. machinery more adaptable to varying field and crop conditions.

When the farmer's wife goes to town, and finds that parking the car involves less strain, she will not be the only one in the family to take advantage of power steering. To reduce operator fatigue, power steering is being included on several tractor models, as standard equipment, in an effort to make tractor operation less tiring.

The trend toward extensive use of hydraulically operated implements has encouraged nearly all of the farm machinery manufacturers to compete in the production of better hydraulic systems for their tractors, and simple, time-saving implement hitches. With the increasing interest in mounted "lift" type tools, came new and better implements especially designed for rapid attachment and easy handling.

ONE of the main costs in machinery operation is fuel. Diesel engines are generally considered more economical than gasoline engines, especially when the diesels are used a great deal. A relatively new fuel which is beginning to compete with diesel fuel and gasoline for use in farm engines, is liquid petroleum.

Liquid petroleum, or L.P. as it is commonly called, is quite expensive in the Northeast. This is because it must be transported through pipelines under pressure from the South where it is produced, and because of the special high compression equipment required for burning L.P. Liquid petroleum can be used economically in engines with high compression ratios. Another

advantage of using liquid petroleum as a tractor fuel is seen in decreased maintenance costs because L.P. burns clean, and thus reduces carbon deposits to a minimum. As transportation costs are cut, L.P. will come into more common use as a farm fuel in the Northeast.

SIDE dressing corn with nitrogen can be done by using either liquid or gaseous ammonia. Liquid ammonia is relatively easy to handle and apply, but anhydrous ammonia needs specially designed, high pressure equipment mounted on a cultivator, to be introduced into the soil. Both forms of ammonia are good sources of nitrogen.

With the thought of better soil conservation in mind, several tillage tools such as the disk harrow and the field cultivator, are being used in place of the moldboard plow. The problem with the disk harrow arises because this implement tends to pack down the soil. The field-cultivator, designed to increase the moisture gathering capacity of the soil, is generally used in pasture renovation. This tool, which has long teeth, goes deep; opening the soil to available water without exposing an unprotected surface to runoff. Despite the increased use of these implements, it is safe to say that the moldboard plow will be around for quite awhile.

Though some of these innovations may be small in scope, and seem unimportant in the first stages of development, they nevertheless improve the efficiency of farm operations. These innovations serve farmers by cutting labor costs and by giving them more time for living.



College of Agriculture

These steers contentedly eat molasses from a feeder at Mount Pleasant. They are part of a feeding experiment there.

Conquering the Southern Tier Hills

Interdepartmental experiment at Mt. Pleasant proves that hill land can be cultivated.

By MARGARET E. SATURN '57

PROPER uses of lime and fertilizer are being studied at Cornell's Mt. Pleasant Experimental area, eight miles from Ithaca. But, although this is the major purpose, Mt. Pleasant's unique location makes this experimentation doubly useful.

Mt. Pleasant is typical Southern Tier hill country and has an average elevation of 1800 feet. This 1077 acre area has been leased by the College of Agriculture from the federal government since 1938. Originally, the government purchased the land, which was classed as sub-marginal, in 1938, at a cost of \$10 to \$15 per acre. When Cornell took over, the land had been abandoned and was overrun with weeds and brush. With some government help, it was cleared, fence rows removed, and farm buildings erected.

BESIDES effects of liming and fertilization, the experimenters on Mt. Pleasant want to determine what can be done with this type of land over a long period of time through proper management. The Departments of

Agronomy, Animal Husbandry, and Conservation, cooperate in experiments at Mt. Pleasant. Three basic principles have been used with the land: lime and plenty of it, drainage of wet spots and correct use of fertilizer.

AGRONOMY department experimenters center mainly around the use of fertilizer and lime. Most of its land is in a five year rotation of corn, oats, hay, wheat, and hay, which was proven most successful after experimenting with several rotations. Corn yields are good with 80 to 90 bushels per acre of dry shelled corn, and wheat yields are also very high. Both of these crops have given profits above fertilizer and lime costs.

Another agronomy undertaking is the maximum yield experiment. This involves a rotation of corn, oats, clover, wheat, and two years of alfalfa. A large field is divided into many small plots and each of these is subdivided into four plots. One of these subdivisions serves as a check. To an-

other, normal amounts of lime and fertilizer are added; to the third plot optimum amounts are added—that is, enough so that the plants get all of the essential nutrients, and to the last plot, the optimum amounts of lime and fertilizer plus irrigation when necessary. From these experiments the maximum possible yields and the advisable goals for these crops can be determined. Also, other effects such as temperature can be studied in relation to amounts of fertilizer and irrigation.

The animal husbandry department keeps all of the dairy heifers at Mt. Pleasant until just prior to freshening. They are used in experiments on pasture and winter feeding. Seven 15 acre fields are used for pasture. Four of these are in the rotation program and they are compared to three others which are in permanent pasture. Two of the latter are in birdsfoot trefoil. Three additional pastures are used for beef cattle on which the best supplements for beef cattle on pasture are being tested. Experimenters hope to show how to produce the maximum beef from grass.

WINTER feeding and management of dairy heifers is another consideration. A modern barn with pen stabling is used for the present winter experiments, which are designed to determine the relative feeding values of corn and molasses with early and late cut hay.

Serving both the agronomy and animal husbandry departments are the conservation department's four farm ponds. Although they are mainly for fire protection, the department on whose land they occur may use them for any other purposes if the fish population is not disturbed. These fish are part of a broad program to determine what types of fish are best for farm pond use. Many varieties of trout are being used. Brook and rainbow trout have been stocked, as well as brook and brown crosses, and brook and lake crosses.

Department members may fish in the ponds on designated days. However, the ponds are not open to the public, as they are experimental and open fishing would ruin the results.

Although this type of land is not generally used for intensive agricultural production, these experiments on Mt. Pleasant are showing what can be done with hill land, when it is properly managed.

From the Gourmet's Notebook

煲飯

If you are bewildered by a Chinese menu simply say "Wo t'sai" to a steward and enjoy delicious food.



Berger

By JEAN E. JELLINEK '58

THE Chinese seem to have a genius for giving flavor and life to otherwise commonplace foods. Their cookery has won a place in the lives of Americans which is unequalled by that of any other foreign food, and eating dinner at a Chinese restaurant has become a tradition with many families. Not only is the food relatively inexpensive, but the restaurants are casual and don't require much dressing up. Unfortunately, the many people who select only the usual "Number 7 dinner" are missing some of the greatest culinary pleasures.

Among them are the different rice dishes. This staple is served in two ways. Dry rice is steamed or boiled in a manner similar to the preparation of rice in this country. However, Chinese rice is very glutinous and sticky. Congee, a food made by boiling a little rice in a lot of water, is also known as thin rice. It is served with different flavorings, such as ginger slices, Chinese parsley, salt, bits of squid, or greens, for a snack or a light meal.

NEXT to rice, vegetables are the most important part of the Chinese diet. In fact, there are even 15 farms in the New York area which specialize in growing Chinese vegetables for local consumption. Some of these vegetables are available in super markets and can be cooked easily at home. Others can be purchased only in Chinatown.

These vegetables are usually cooked for only a short time, so that they are served still slightly crisp. Chinese cabbage, which has a mild but distinctive flavor, can also be served raw. Chinese melon looks like an olive green pumpkin covered with frost, and is sautéed until it is tender. Although ginger is mainly used as a dried flavoring, fresh ginger roots are sometimes cooked with meats. These are used only for their flavor, and the large pieces are removed. Mung bean sprouts, which can be bought in cans or sprouted at home, are pale, translucent, and delicately-flavored. Soy beans, which resemble lime beans, are made into soy bean sauce, cakes, or curd.

MEATS are used less for bulk in the Chinese diet than for flavoring. Frequently, a small amount of meat may be used for flavoring rice or vegetables. No other meat will be served at the same meal. Chicken and pork are the most popular; poultry and hogs are raised on almost every Chinese farm. Because of the abundance of chickens, eggs are often served. They may be cooked fresh or preserved in lime, and are called Century Eggs. Although Century Eggs will keep indefinitely, they are best served when 100 days old. In certain areas mutton and lamb are popular. Since meat and dairy cattle are rare in China, beef is not an important meat, and milk, butter, or cheese is never served. Fish is considered an even greater delicacy than meat. However,

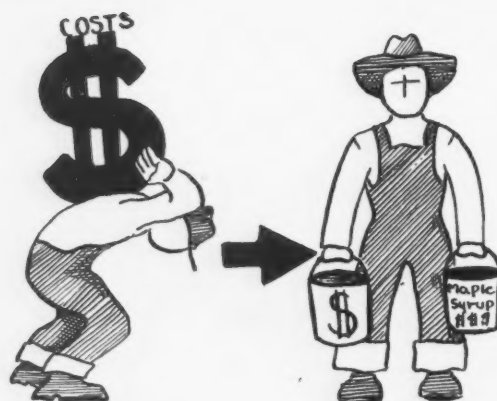
Chinese-American restaurants use all these foods.

BOTH table and unrefined salt are used for seasoning, but the latter is the more common. But, sauces, not salts, provide the most important seasoning. Soy bean sauce, fairly common in America, is the most famous of the Chinese sauces. Shrimp sauce and oyster sauce are both very highly spiced.

The style of cooking in Chinese-American restaurants is a modification of the original. The essentials are the same, but because many native Chinese foods might be distasteful to Americans, the menus and dishes have been changed slightly.

Although there are endless methods of Chinese cooking, the three most important are stir-frying, red cooking, and white cooking. Stir-frying has been defined by Chinese cook book author, Buwei Yang Chao, as a "big-fire - shallow - fat-continual - stirring - quick - frying of cut-up material with wet seasoning." Thus, it is similar to sautéing. Red cooking is slow moist cooking with soy sauce, and white cooking is slow cooking without soy sauce.

The only way to test the flavor of these raw ingredients is to sample them. So when you go to a Chinese restaurant and don't know what to order, just say, "Wo t'sai," and add that you want to eat like a Chinese. But remember not to hurry the cook, for his preparation is an art, and he will spend any amount of time on it.



Maple Syrup Can Lighten the Load.

By MILTON A. LENDL '56

Tree Tapping for Profit

THE giant grip of the cost-price squeeze has the farmers of America wincing. The nation's top economists foresee no immediate relief to the problem, and it seems that it will be with us for some time to come.

In casting about for some way to help the farmer ease the squeeze, the economists have emphasized certain basic principles of good business and sound business management. Topmost on the list is efficiency of the farm operation. This means that in order to make the greatest possible profit, the farmer must utilize his labor, machinery, and capital to the fullest extent.

In the Northeast, many farmers could be adding needed dollars to their incomes by simply taking better advantage of what they already have and with little or no further investment involved. Robert D. Bell of the department of agricultural economics at Cornell says that many Northeastern farmers could be adding \$800 or more a year to their incomes by tapping their maple trees. Bell also noted that the farmers of New York State in particular have been lax in taking advantage of this golden opportunity.

The number of trees tapped in the state has dropped considerably. Bell cites figures from 1932, when 4,487,000 trees were tapped, and 1,233,000 gallons of syrup were produced. But in 1955, New York farmers tapped only 1,694,000 trees with a production of 466,000 gallons of syrup.

Only a little more than four percent of the farmers in the state produced that quantity of syrup even though the consumer demand for maple products is higher than ever, and prices have been very favorable for the farmer. This alone should make him sit up and take notice.

Furthermore, maple syrup time comes during a slow season, usually mid-March to mid-April, when normal tillage operations are at a standstill. It affords an excellent opportunity for utilizing family labor and for making more efficient use of the regular hired help. The farmer can even utilize his otherwise useless low quality firewood for boiling the sap to syrup.

BUT even with all these advantages plainly in view, the farmers of New York have persisted in disregarding the maple syrup business. This attitude can best be attributed to the effects of the post-war boom and the peculiarities of human nature. In the years following the Second World War, farm incomes increased and living standards went to an all time high. Many of these farmers who had previously produced maple syrup were in the business merely because it afforded a tidy side income in addition that of their main enterprise. When these farmers realized that their income was high enough so they no longer needed the added profits from their maple syrup production to allow them a comfortable living, they quit tapping their trees and took life a little easier.

But now that the price-cost squeeze has the farmers squirming, and they are in need of a little extra income, we may see the revival of the maple syrup business as our farmers go after that \$800 a year or more.



Flower Show

ON March 11, at 2 p.m., amidst a flash of cameras and much applause, officials of the Thirty-ninth Annual International Flower Show cut the tape and opened the doors of the Wanamaker building in New York to the throngs of people outside. Before those doors closed for the last time on March 17, approximately 150,000 people had seen the result of months of work by the Horticultural Society of New York, and the New York Florists' Club, who were the show's conductors, and the various groups that competed in the huge production.

There were tropical gardens lush with orchids, ferns, and palms; contemporary gardens with terraces, spring flowers, and evergreens; and naturalistic gardens of Jack-in-the-Pulpits, Cattails, and other wild flowers growing near running streams. Flower arrangements, table settings, educational exhibits, and exhibition flowers were tucked away into every bit of available space. Concessionaires sold everything from garden tools to encyclopedias.

The spectators oh'd and ah'd frequently. Most often though, they commented on how much planning it must have taken to coordinate the exhibits and bring whole gardens to life all at the same time within the confines of a building. They were right. It did take a lot of planning.

That planning actually started months ago, when the sponsors of the show opened



Bunnies, jelly beans, and Easter baskets are included in this group of arrangements by a commercial florist competing to show the most original and ingenious use of florists' materials.

By NATALIE L. GUNDREY '58

Hewitt

How Brings Spring to New York

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competition for the event. People wishing to compete bought certain amounts of floor space. They entered one of four classes, private, non-commercial, commercial, and amateur, or in an open class. Contestants were completely responsible for their own exhibits, which had to be ready for judging at 10 a.m. on opening day. Immediately they began to plan their exhibits and grow the plant materials they would need, forcing flowers and trees into bloom wherever necessary, and timing it so that everything would be in bud or bloom by show time.

A few days before the show, they began to set up the model gardens. On Wednesday, March 7, Wanamaker's was nothing but a cold, bare building with a few chalk marks on the floor. By Thursday morning at ten, it was the scene of feverish activity. People were running frantically from delivery entrances to their exhibits, towing trees, plants, statues, and tools. The dust was thick, and the noise of hammering and sawing was loud. Wrapping paper, string, and peat moss were underfoot.

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QUICKLY, the model gardens began to take shape. They were each bordered with a six-inch high fiber-boarding. The floors underneath were waterproofed. Pools and waterfalls, for which drainage system had to be set up, were built first. Then terraces were constructed and statues put in place. Trees and shrubs with their root balls wrapped in burlap were eased into their posi-

tions. All the plants from orchids to dandelions, had been grown in flower pots. These were set down according to design. The pots were hidden under a thick layer of peat moss, which resembled earth when smoothed out. (It took at least ten 100 pound bags of peat moss to cover each 100 square feet of garden space.)

ACCESSORIES were arranged; grass, cut in rectangular sheets, was laid down and fitted together like a jigsaw puzzle. At the last minute, the gardens were watered, the floors were swept, and small signs announcing the names and classes of the exhibitors were put in place. Everything was ready for the public. There was just one more thing to worry about—the judging.

At 10 a.m., the judges, noted landscape designers and horticulturists, viewed the exhibits. There were gardens of specific types, such as tropical, seasonal or for children, and of designated areas from 200 to 1000 square feet. They were judged for design, choice of plant materials, appropriateness and seasonality, accessories used, condition, and correctness of labeling.

Flower arrangements were also judged. There were compositions by children, amateur competitors, and professional designers. These were rated for artistic perfection, color harmony, proportion, harmony with the container and accessories, originality, and condition. Most of the judging was finished before the show

opened, and the awards were put in place immediately for the public to see.

The visitors saw awards on educational exhibits, as well as those designed purely for entertainment. Cornell University presented "The Story of Chrysanthemums", which demonstrated how these flowers can be brought into bloom steadily throughout the year, rather than at one ordinary blooming time, by adjusting the amount of light the plant receives. Faculty members from Long Island Agricultural and Technical Institute at Farmingdale, as well as county agents from Nassau, Suffolk and Westchester gave information to spectators.

The Federated Garden Clubs of America stressed conservation of woodland materials. They showed a garden in which a home owner had made use of the natural materials on his property before the builder stripped it. Evergreens, flowering shrubs, and wild flowers surrounded a terrace made of cross-sections of fallen trees.

Parsley, sage, thyme, spearmint, catnip, and other herbs were part of a tiny kitchen garden displayed by the New York Chapter of the Herb Society of America. The exhibit showed how easily these herbs can be grown and how useful they can be in cooking deliciously seasoned meals.

A commercial rose grower's display, "Living With Roses", featured a series of arrangements representing fifty years in a woman's life. Each arrangement used a different variety of roses, and was placed in a colorful picture nook. Each nook revealed a special time in her life, from the time she fell in love until her fiftieth wedding anniversary.

The Men's Garden Club was a little more practical minded. They demonstrated the value of various mulches on roses and showed what a wide variety of materials could be used to protect the soil around the bushes. They employed dust, buckwheat hulls, tobacco stems, sweetgum balls, shredded redwood bark, pine needles, oak leaves, sawdust, wood chips, peat moss, stone chips, salt hay, and aluminum foil.

THERE were numerous other exhibits on the show's three floors, as well as refreshment areas and resting places for tired visitors. As people streamed out one door, others came in. On the last day, the doors were closed permanently. The lights were dimmed, the building was aired, and the displays were torn apart. Wanamaker's was once again a cold bare building. A few programs were scattered on the floor—the last remnants of the glamor and beauty of the flower show.

Story Behind the Crop Reports

The yields of the nation's crops are estimated by the Department of Agriculture with amazing accuracy, and protected like a military secret until release time - 3 P.M. on the tenth of every month.

By NATALIE L. GUNDREY '58

WHEN Congress gave the Patent Office \$1,000 for "the distribution of seeds and collection of agricultural statistics", the need for accurate estimation of the nation's crops was recognized even then, in 1839. Today, the United States Government Crop and Livestock Reporting Service spends \$4 million a year and includes 600,750 people. This organization issues monthly reports on 500 farm crops, as well as seasonal and weekly reports for other crops.

Millions of people are interested in these reports. "How many bushels of corn will be harvested this year, and how much more is this than last year?" they want to know. They find out on the tenth of the month, when the report is released. "Corn is estimated at 5% higher."

AS a result, farmers decide to cut their corn acreage next season and plant something else to make up for the expected low corn prices. Transportation company and warehouse administrators make plans for building new cars and increasing the capacity of their storage houses. Food companies begin advertising campaigns for corn. Cannery, packers, and freezing companies expand their facilities for increased production. Retailers try to sell more corn before the price goes down. Finally, housewives, seeing the lower prices coming, plan ways to save money by feeding their families corn more often.

These people depend on the accuracy of the crop estimates. It is the Government's job to see that they are as accurate as possible. The reports are compiled cooperatively by the Fed-

eral Government, 28 state agricultural agencies, and 9 agriculture colleges and experiment stations. 750 statisticians keep the methods of estimation as modern as possible, and 600,000 good hearted people, representing a cross section of American farmers, volunteer information. From the collective data of these people, the statisticians compute the size of the entire nation's crops.

AT the beginning of July, work on the August reports starts. Questionnaires are sent to volunteers, who estimate the crops on their own farms, and send the figures to the state agricultural offices. The state offices tabulate the figures, and send them to Washington via special delivery mail. Estimates of speculative crops, (those that have a large volume of futures trading on the area's exchange, and that have a production so great that they are highly correlated with the area's total production) are marked "A". They are sent directly to the Secretary of Agriculture. Non-speculative crops are marked "C", and mailed to the Crop Reporting Board.

In the meantime, trained statisticians conduct field surveys of typical farms which raise certain crops. They count the prospective yield, considering the weather, and other factors which might affect the final yield. Then, they return to Washington to make their recommendations and compile the complete report.

The final estimate is never made until the last minute, however. Employees never see it in full until then, and they are forbidden "under penalty of law" to speculate on the outcome. Because so many interest groups are

concerned with the outcome of these reports, such precautions have to be taken to keep the results absolutely secret until release time.

RELEASE day is "Lock-Up Day" in the South Building of the Department of Agriculture. Telephones are cut off, shades are drawn and sealed closed, and no one is allowed to leave the building after a certain time on that day. Armed guards patrol around the building to see that no news leaks out before the deadline.

The state estimates, which have arrived in Washington, have been kept in a locked mailbox. Only 2 people have keys for it; Sterling Newell, Director of the Division of Agricultural Estimates, and a representative of the Secretary of Agriculture.

Early in the day, and in the presence of a guard, these 2 men open the mailbox. The estimates and the recommendations of the statisticians are compiled into the final report, which is then approved by the Secretary of Agriculture, and mimeographed by government secretaries.

At 2:55 p.m., the officials walk into a large room filled with waiting reporters and press correspondents, and lay copies of the report face down in telephone booths on the far side of the room. The phones and telegraphs are connected to press associations, newspapers, and other interested organizations. At exactly 3 p.m. the Secretary shouts "Go!" The reporters run for the booths, turn the reports face up, and phone out the results.

The story is out. The American public takes it from there, and the Government starts preparing for next month's report.

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Farm and Home Week In Progress

Tuesday, March 20, 1956—During an informal interview with Roy Curtiss III '56, chairman of Farm and Home Week student participation and Robert W. Taylor '56, president of Ag-Domecon Council. Countryman's Douglas D. Innes '59 recorded the following impressions:

WHEN I asked Robert Taylor how Farm and Home Week looked from the point of view of the Ag Domecon Council, he mentioned that students were getting the "feel" of their jobs without being rushed by the deluge of visitors that usually register during the first two days. Roy Curtis added that the student services were going quite smoothly, and that students were giving much of their time to committee work—a good sign, in view of the fact that some classes were being held as usual.

Roy seemed to feel that the over-all coordination of programs between the

two colleges was poor, because the lectures and exhibits on the Ag campus were of general interest to both farmers and Future Farmers, but the Home Economics program was intended primarily for adults. He also mentioned that the change in the Home Economics program was planned as an improvement over past years, and that he hoped that registration for this program would improve as the week progressed.

The agricultural exhibits were quite similar to those of former years, Robert replied when quizzed about the Agricultural program, and he

added, that Riley-Robb Hall, the new agricultural engineering building, was proving to be a real attraction for people visiting Cornell this week.

"Just what do you think is the reason why registration for the first two days of Farm and Home Week is lower this year than last, Roy?"

"Well, attendance is usually weak on Monday and Friday. Monday was lower this year than it was last year, and I will be very interested to see what Friday will bring as far as registration is concerned."

Robert Taylor then added, "I think the snow, cold weather, and poor road conditions are responsible for the lower registration so far, but I believe attendance will be better on Wednesday, if the weather is a little milder."

Both of the men interviewed believed that this year's Farm and Home Week is to date a definite success as far as student participation is concerned, and that registration should increase if the weather continues to improve.

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Here's a group of Cornell students attending a Federal milk marketing hearing at Syracuse. Perhaps one of your friends is among them.

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Student Designs On Display

By THALIA NUNGEZER '57

ROUND and round swing the fantastic plastic shapes. They move slowly in various directions but never stop. They form a mobile which may be seen hanging from the ceiling of the art gallery on the third floor of Martha Van Rensselaer Hall. This mobile is part of an exhibit by students in housing and design courses at the home economics college. Their work is on display during the Cornell Festival of Contemporary Arts.

The mobile was created in a basic color and design class. Other objects from this class are forms made by holding wet plaster of Paris between cupped hands until the plaster dries. These are only a few of the creations from the basic design course. The students' ingenuity and imagination lead to designs in all sizes, shapes, and colors. Materials range from enamel to paper.

More advanced courses in interior design feature plans and drawings. These are also exhibited in the gallery. Students work with certain house plans all term. They make

paintings of the rooms in the houses and change their plan if necessary, to make the home more livable. Then they select and arrange furnishings and color schemes.

THE course in budget interiors has exhibits of refinished furniture. This class offers instruction in inexpensive decoration; a subject of importance to many beginning homemakers. Handicraft objects and student designed textiles are also on display.

The courses in housing and design are offered with the main objective of increasing the students' abilities in achieving successful individual and family life. This is done by making the home with its surroundings and furnishings as practical and pleasant as possible.

In addition to the housing and design student exhibit, the gallery, under the chairmanship of Clara Straight, an assistant professor of housing and design, presents new exhibits each month. These are contributed by other departments of the college and by outside sources in the

It's Spring!

And this most welcome season is certainly evident in the Campus Store.

The Co-ed Shop is now featuring cotton skirts, blouses, Bermuda shorts, and T-shirts for campus and sports wear.

The Men's Department is mad with plaids — sportshirts, ties, belts, caps, and swimsuits.

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Barnes Hall

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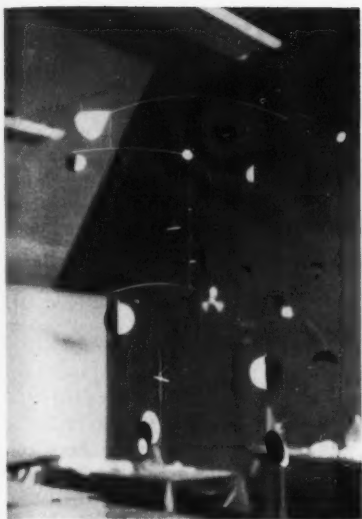
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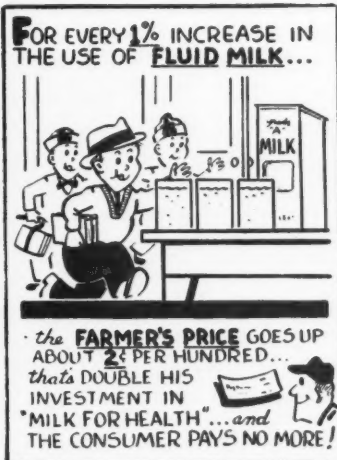
College of Agriculture

Students in Miss Sarah Neblett's beginning color and design course made the above mobile as a term project.

fields of housing, interior design, and painting.

"California Design" is another exhibit this spring. It consists of several hundred home furnishing articles designed by Californians during the last year and judged as the best in that state. This display is on loan from the American Federation of Arts from May 4-25. The final show, running from June 6 through 22, is a collection of articles executed by Thomas Donkin of the housing and design extension staff.

THE exhibition program aims to provide visual education and enjoyment of the arts of design. It provides contact with current activities and modes of art expression. Members of the university community and other visitors as well as home economics students are invited to see the exhibits at the Martha Van Rensselaer Art Gallery.



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Mr. Hemming

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Coeds Assist in Hair Study

By PATRICIA Y. HUGHES '59

YEARS ago, hair nets were just the thing to tie back long, flowing tresses. The hair net fad isn't really coming back even though several coeds have been wearing them constantly for the last few months. These girls are aiding Miss Frances A. Johnston of the foods and nutrition department in the College of Home Economics. They are subjects for a nutrition study which will determine nutrient loss through the hair.

This hair study is a small part of a project which will determine how much iron, calcium, phosphorous, and nitrogen the body needs to maintain life. Hair is another area of nutrition loss which must be measured to have an accurate and scientific report. The amount of hair lost by each girl over a specific period of time is measured. Then each gram of her hair is analyzed for its nutrient content.

MISS Johnston has enlisted the help of thirteen girls—blondes, brunettes, and redheads—who are leaving all the hair they lose in Miss Johnston's laboratory. Each girl wears a net day and night so she will not lose any hair. Every morning she gets up early and goes to the lab on the fourth floor of Martha Van Rensselaer Hall to comb her hair. But just going there isn't enough. She puts on a nylon uniform (it sheds hairs), plastic bedroom sluffs, and a plastic cape. She stands

on a plastic sheet while she combs her hair. Finally she puts on the hair net, changes to street clothes, and leaves for her eight o'clock class. Not one loose hair goes with her. She also has her hair washed and cut in the lab. If she wants a permanent, it is given to her there. A local beautician comes to the lab to give permanents and haircuts free of charge to the girls.

WHEN all the hair has been collected from each girl, Miss Johnston and her assistants, Elizabeth Diaio, Barbara Lee, and Lois De Broch, analyze the hair. First they clean it thoroughly so that there are no foreign particles such as dust and dandruff present. They had tried many chemicals but are now using repeated washings with just plain soap. Removal of foreign particles is only one of the problems which the experimenters face. Another is the tendency of the hair to pick up electrical charges which cause it to stick to containers and fingers. Still another problem is the hygroscopicity of the hair; that is, its ability to absorb quite a lot of water without getting wet. This makes weighing inaccurate.

Miss Johnston warned that her findings are not going to lead to a cure for baldness. Men can still look forward to being hairless. But they won't have to worry about losing any nutrients through their hair if they haven't got any.

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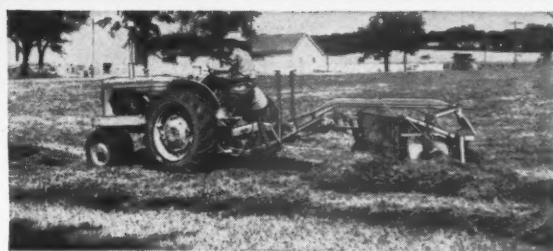
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ALLIS-CHALMERS



Now Atoms Fight Insects

Scientists use isotopes for insect research and control.

By JOHN G. CROWE '57

IT was a bad day for the insects 21 years ago when Curie and Joliet bombarded aluminum with radioactive particles and discovered artificial radioactivity. The isotopes (charged particles) emitted from this reaction were the first of a long line of isotopes being used in research.

A few kinds are being used in campaigns on insect control. The most common use of radioactive materials in insect study is in the form of tracers. Tracers are isotopes of elements which emit particles capable of registering on geiger counters and thus enabling the material to be identified in spite of chemical changes within it caused by the insect. The isotopes to be used will be determined by the nature of the experiment. For example, if phosphorous metabolism is under study, then an isotope of phosphorous would be used. Hansbury and Norton were the first to demonstrate the practicality of using tracers as an effective tool in research. They worked with the effects of arsenic in silk worms at Cornell in 1941.

During World War II, DDT was an extremely effective insecticide. But in a few years it became increasingly less potent as resistant strains of insects developed and multiplied. To find out how this insecticide was made ineffective, radioactive DDT was traced through houseflies and found to be changed into a harmless metabolite called DDE.

DOCTORS Arnason, Fuller, and Spinks, all Canadian researchers, used tracers to reveal movements of worms underground. Not too much was known about this, for the only method of study had been to dig worms up and note their positions. As there was no practical way to feed the insects radioactive materials, radio cobalt was inserted into the body of each worm. This did not hinder the normal functioning or the motility of the worms. By calibrating the instruments for various soil depths, both horizontal and vertical movement could be observed.

Tracers are also used in tests run

on dispersal patterns of insects to help determine the speed with which infestations tend to spread from orchard to orchard. Insects such as Cherry Flies are "tagged" and released from a central point. After being recovered from traps spaced at various distances they are easily identified from other Cherry Flies not in the test.

However, radioactive materials cannot be used directly as insecticides. A few years ago quite a controversy was aroused over the prospect of using them to kill insects by direct exposure on a large scale. After all the factors had been considered it was concluded that people and insects would both be effectively eradicated.

THE closest scientists have come to combating insects directly with radiation is in the case of the screw worm fly. In cooperation with the Netherlands West Indies Government, the USDA's agricultural research service eradicated this destructive livestock pest from the small Caribbean island of Curacao. Thousands of male flies were sterilized in the laboratory through exposure to radioactive cobalt rays. Upon being released from airplanes over the island, the sterile males, which greatly outnumber native males, mated with all native females. None of the resulting eggs hatched: consequently the whole screw worm population shortly disappeared. After such good results in Curacao the USDA is seriously thinking of a similar program for Florida, which suffers several million dollars livestock damage annually from screw worm flies alone. To cover two-thirds of the state of Florida, or 50,000 square miles, the operation will need to be proportionally larger than the Curacao program of 170 square miles. Large factory-like laboratories capable of producing 50 million flies per week and handling large sources of gamma radiation are eventually planned.

In the future, wider uses will be found for radioisotopes as the field of insect science expands and refinements in the atomic field produce easier isotope handling methods and lower costs of production.



College of Agriculture

Ithaca Game Farm Breeds Pheasants for Distribution

By DALE F. BURRELL '59

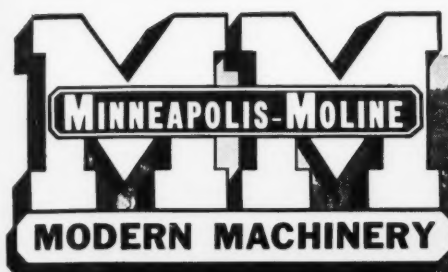
NEXT week, 12,000 pheasants will be hatched at the Ithaca Game Farm. This is the first of Ithaca's ten hatches which will total about 120,000 pheasants. Other New York State game farms will hatch more than 200,000 pheasants this year.

The Ithaca Game Farm keeps nearly 3,500 breeding birds, which are wintered in fenced fields, with a minimum of protection in the form of snow fences. The fact that no birds died from exposure is testimony to the hardiness of the stock. These birds average more than 40 hatchable eggs per year, which after rigid inspection are incubated in the farm's modern system.

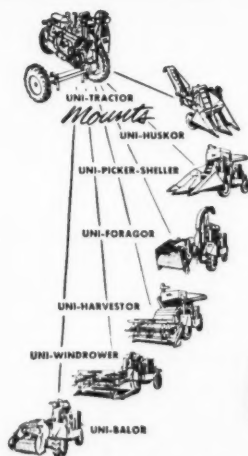
APPROXIMATELY 55,000 of these newly hatched pheasants will be distributed to more than 1,000 members of 4-H clubs throughout the state. The 4-H'ers will receive one dollar for each bird over six weeks old that they release anywhere in New York State on unposted land. The remainder of the 200,000 will be kept at the game farms and released when they are old enough.

The series of hatchings will be concluded by mid-June. These birds will mature before winter, and thus have a good chance to survive and reproduce.

It is a common fallacy that the sportsman's take will be directly increased because many pheasants are being released. Actually, only a small percent of the birds are legally taken the same year of their release, and it is impossible to determine accurately how many of those that evade the hunter will still be alive for the next year's breeding.



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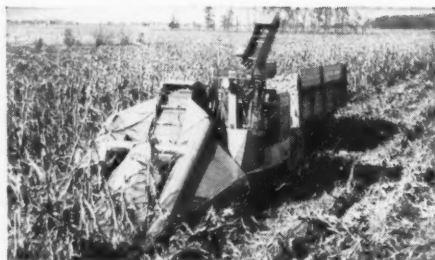
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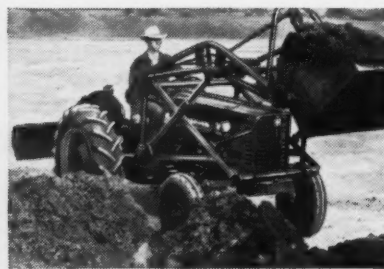
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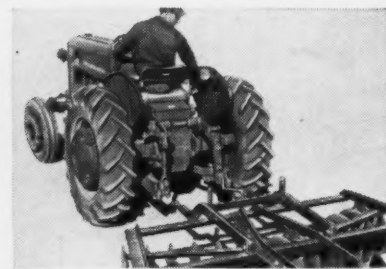
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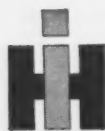
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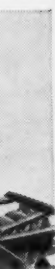
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